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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/808,292

03/25/2004

Tetsuji Kondo

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EXAMINER

GIMIE, MAHMOUD

ART UNIT

PAPER NUMBER

3747

DATE MAILED: 05/01/2006

Please find below and/or attached an Office communication concerning this application or proceeding.



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**BEFORE THE BOARD OF PATENT APPEALS  
AND INTERFERENCES**

Application Number: 10/808,292  
Filing Date: March 25, 2004  
Appellant(s): KONDO ET AL.

**MAILED**  
**MAY 01 2006**  
**GROUP 3700**

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Dialto T. Crenshaw  
SUGHRUE MION, PPLC  
For Appellant

**REVISED EXAMINER'S ANSWER**

This is in response to "order returning undocketed appeal to examiner" for revision mailed on April 7, 2006, that is based on an examiner's answer written in response to an appeal brief filed on November 18, 2005 appealing from an Office action mailed on April 19, 2005.

**(1) Real Party in Interest**

A statement identifying by name the real party in interest is contained in the brief.

**(2) Related Appeals and Interferences**

The examiner is not aware of any related appeals, interferences, or judicial proceedings which will directly affect or be directly affected by or have a bearing on the Board's decision in the pending appeal.

**(3) Status of Claims**

The statement of the status of claims contained in the brief is correct.

**(4) Status of Amendments After Final**

The appellant's statement of the status of amendments after final rejection contained in the brief is correct.

**(5) Summary of Claimed Subject Matter**

The summary of claimed subject matter contained in the brief is correct.

**(6) Grounds of Rejection to be Reviewed on Appeal**

The appellant's statement of the grounds of rejection to be reviewed on appeal is correct.

**(7) Claims Appendix**

The copy of the appealed claims contained in the Appendix to the brief is correct.

**(8) Evidence Relied Upon**

The following is a listing of the evidence (e.g., patents, publications, Official Notice, and admitted prior art) relied upon in the rejection of claims under appeal.

US 5,724,946

Franchitto

03-1998

### **(9) Grounds of Rejection**

The following ground(s) of rejection are applicable to the appealed claims:

#### ***Claim Rejections - 35 USC § 102***

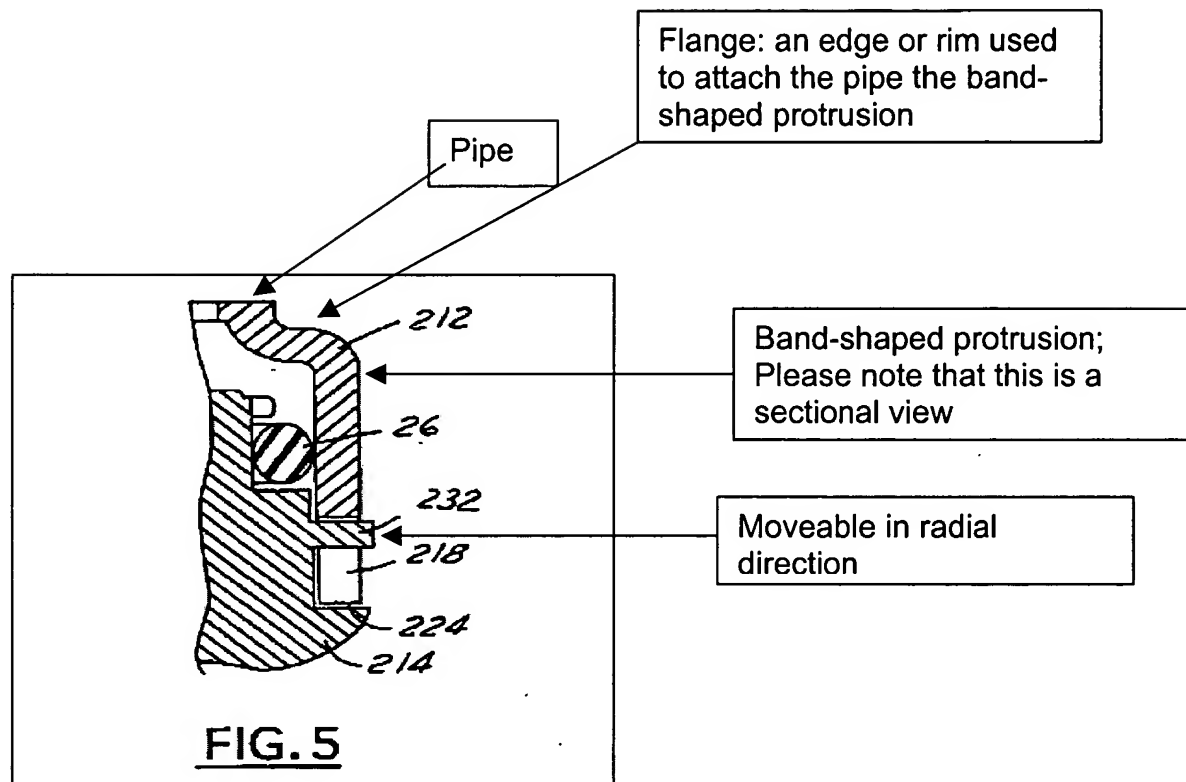
The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 3 and 11 are rejected under 35 U.S.C. 102(b) as being anticipated by Franchitto (US 5,724,946).

Franchitto discloses a fuel injection device comprising a fuel distribution pipe (10,110) and a fuel injection valve (214) mounted on said fuel distribution pipe (fuel rail 10,110), wherein a band-shaped protrusion extends in the radial direction from a flange portion of a connecting pipe member arranged on said fuel distribution pipe (10) and further extends in parallel to the axis of said fuel injection valve, said band-shaped protrusion is provided with a fitting hole (218), and said fuel injection valve ( 214) is provided with a snap spring (232) that is fitted into said fitting hole (218) and extends in the axial direction of said fuel injection valve, see figures 5-7.



With regard to claim 11, wherein said snap spring (232) is moveable in a radial direction (the locking pin 232, has to move sideways to snap in, figure 7) when mounting the fuel injection valve on said fuel distribution pipe.

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 4,7 and 10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Franchitto (US5,724,946).

Franchitto discloses all the limitations as applied to claims 3 and 11 above except for further optional changes in the shape of the band-shaped protrusion (212).

At the time the invention was made; it would have been an obvious matter of design choice to a person of ordinary skill in the art to provide the band-shaped protrusion (212) with an engaging portion, with a narrow portion, or a thin-walled portion because applicant has not disclosed that doing so provides an advantage, is used for a particular purpose, or solves a stated problem. One of ordinary skill in the art, further, would have expected applicant's invention to perform equally well with the fuel rail and injector assembly as disclosed by Franchitto because it snap fastens together the fuel injector and the fuel rail injector cup, see abstract.

#### **(10) Response to Argument**

(a) Appellants argue that Franchitto does not teach or suggest at least "said fuel injection valve (214) is provided with a snap spring (232) that is fitted into said fitting hole (218) and extends in the axial direction of said fuel injection valve" because the locking pin (232) simply slides into the locking groove (318), and further the locking pin (232) is not a spring and does not perform any springing action.

These arguments are not persuasive because the locking pin (232) simply does not slide into the locking groove (318) as argued by appellants, but rather, it snaps (col. 3, ll. 9) in the locking groove (218,318). Franchitto teaches (with reference to figure 4) that to mount the fuel injector (218), the locking pin (232) is received in the locking

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groove (218), urged past the necked down portion (220), and received in the retaining portion (222), which indicates that the locking pin is flexible enough to be urged through the necked down portion (220). Further, with reference to figure 7, the locking pin is retained in the locking groove (318) after being urged through the necked down portion of the injector cup and extended circumferentially (col. 3, ll. 22-23) which inherently require flexibility (spring action) of the locking pin (232) that is consistent with the language of the Franchitto reference as being snap assembled (col. 3, ll. 33).

(b) Appellants argue with reference to claim 11, that the Examiner does not show and Franchitto does not disclose a component that corresponds to the claimed "snap spring (232)" which is "movable in a radial direction when mounting the fuel injection valve (214) on the fuel distribution pipe (10,110).

This argument is not persuasive, because the snap spring (232) moves radially (figure 7) when mounting the fuel injector (214) on the fuel distribution pipe (10,110) that is attached to the fuel injector cup (12,212,312).

(c) With regard to claims 4,7 and 10, appellants have simply stated that dependent claims 4, 7, and 10 are patentable at least by virtue of their dependency from independent claim 3, which is true if independent claim 3 is found to be patentable over Franchitto.

#### **(11) Related Proceeding(s) Appendix**

No decision rendered by a court or the Board is identified by the examiner in the Related Appeals and Interferences section of this examiner's answer.

For the above reasons, it is believed that the rejections should be sustained.

Respectfully submitted,

  
MAHMOUD GIMIE  
PRIMARY EXAMINER  
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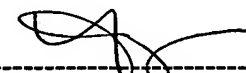

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